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Putting all one's eggs in one basket: Relational contracts and the management of local public services

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ABSTRACT

French municipalities often contract out the provision of local public services to private companies, and regularly choose the same private operator for a range of different services. We develop a model of relational contracts that shows how this strategy may lead to better performance at lower cost for public authorities. We test the implication of our model using an original database of the contractual choices made by 5000 French local public authorities in the years 2001, 2004 and 2008.

1. Introduction

During the last few decades, the role of the private sector in the management of public services has been the subject of some debate, particularly within local governments. In many countries, local public authorities such as municipalities must provide a wide range of services (*e.g.* street repair, water management, sewage treatment and disposal, urban transport). Recent data show the increasing involvement of the private sector in the management of these services. In the U.S.A. for example, around one third of residential solid waste collection, solid waste disposal and street repair services are provided through contracts with private firms (Levin and Tadelis, 2010). In Europe, the use of outsourcing has yielded even greater levels of success: 63% of medium-sized French cities contract out their water treatment and distribution functions, and 58% of them outsource their sewage treatment (Dexia Crédit Local de France, 2006).

Although the debate about the management of local public services focused first on the determinants of privatization (Williamson, 1999; Hart et al., 1997; Lopez de Silanes et al., 1997), there is now a fair degree of interest in some of the other issues involved. For example, some authors have compared the selection mechanisms (competitive bidding and negotiation) in order to determine their relative efficiency (Bajari et al., 2009). Revenue sharing arrangements have also been studied (Engel et al., 2001, 2006). The question of what determines the choice of private operators, however, has received rather less attention. Interestingly, local public authorities tend to contract out several different services to the same operator,

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even if they have access to a number of potential candidates (*e.g.* Gence-Creux, 2001). We consider the reasons why public authorities often choose to "bundle" their services in this way.[1] We show that bundling may represent a way of making contracts self-enforcing, thereby achieving a greater efficiency, *i.e.* an optimal level of cost-reducing investment at a lower price for consumers.

The perspective we adopt takes contractual incompleteness for granted. Indeed, the quality of services required by a public authority is often difficult or prohibitively costly to specify *ex ante*, at least in a way that can be enforced by a court of law (Hart et al., 1997). As a consequence, renegotiation will occur *ex post*. Yet, following the notion of "relational contracts" as defined by Baker et al. (2002) or Baker et al. (2008), tacit dealings between the parties concerned may create some incentives to invest in elements that are non-contractible. Because informal agreements cannot be enforced, self-enforcement arises as a result of the potential for future business between the partners, and with respect to reputational factors. The findings of Goldberg (1976), or recent reports such as that of the European Commission (2004b), underscore how informal relationships between public and private contractors may help to circumvent the difficulties found in formal contracting.[2]

We begin by developing a model in which a public authority decides to contract out the management of two services, whose non-contractible investments have different effects on the resulting social benefit. The public authority can decide to use a single private operator for both services, or to choose two different operators. The key question we consider here is whether this decision affects the ways in which providers address non-contractible outcomes. We show that whether or not the transactions are bundled has no effect on efficiency in a static framework. However, where parties have concerns about future business opportunities, things are different. We demonstrate that a private partner may agree to invest at a level that is socially optimal provided that he is rewarded for such behavior by a transfer, or by a promise that he will subsequently be re-engaged. We show that for two different services, informal agreements are more easily sustainable when the private manager is awarded both contracts. This effect is similar to the effect of multimarket contacts as described by Bernheim and Whinston (1990) in their study of collusion. We extend the idea of multimarket contacts with different cost functions to a public–private relationship, and explore the consequences with regard to the performance of public services. More specifically, in our model, we show that the transfer that the public authority must pay to achieve the social optimum is lower when both contracts are awarded to the same operator, which implies that the total price paid for the management of both services is also lower.

We test the implications of our model using an original panel database containing data from the French Environment Institute (IFEN) and the French Health Ministry (DGS). The data consist of information related to 5000 local public authorities and their contracts in force in 2001, 2004 and 2008. The French case is particularly interesting, because municipalities have a legal obligation to provide some services but are free to choose how to do so. Many municipalities choose to contract out the provision of services, and allocate contracts through a franchise bidding process (Demsetz, 1968), an allocation mechanism promoted through legislation at both national and European levels. In France, the selection of the private operator involves some negotiation, with room for informal agreements. For all these reasons, our data set provides us with a large, relevant and unique sample with which to assess our proposition.

Our results show that the use of the same operator for both the distribution and the sanitation of water leads to a significant price reduction for consumers. As a consequence, while previous works (Gence-Creux, 2001) have considered bundling as evidence of collusion or corruption, our results suggest that bundling may be a strategy for achieving better efficiency, and may benefit consumers.

The paper is organized as follows. In the next section, we describe the relevant literature and specify the contribution of our paper within it. In Section 3, we describe the institutional details of the management of local public services in France. We then present the model that yields our main propositions (Section 4). In Section 5, we present our data and tests. Our conclusions follow on from this.

2. Related literature

We believe that our paper makes a contribution to the literature on relational contracting and on public–private partnerships. Our modeling approach is inspired by previous work on relational contracts as discussed by Baker et al. (1994, 2002, 2008). In particular, these authors show how objective and subjective performance measures may be optimally combined to ensure the provision of incentives. In our own paper, the combined use of formal and informal tools also helps to circumvent the difficulties experienced in contracting. However, our contribution departs from the approach of the authors cited above who considered the perspective of future transactions to be the main element in the enforcement of informal dealings. In contrast, we propose that the number of transactions that take place between identical partners also affects the enforcement of informal contracts. We further provide what we believe to be the first econometric test of this proposition

[1] The "bundling" of services described implies that the public authority decides to contract out several different services to the same private operator, rather than relying on a different operator for each service. Thus, "bundling" is always initiated by the public authority.

[2] Case studies undertaken by World Bank (2006, p. 180) in Manilla and Gabon show the role of informal dealing in public–private partnerships. The World Bank reports some informal commitments to additional investments by the concessionaires over the lifetime of a contract. Case 17 in the Resource Book on PPP Case Studies (European Commission, 2004b) summarizes the German experience (*Mülheimer Entsorgungsgesellschaft mbH*), and states that "to handle the complex multidimensional objectives and to protect their interests the parties had to agree on several informal and formalized agreements" (p. 84).